IN THE SPECIFICATION

1. Please amend paragraph 0003 to read as follows:

[0003] In the conventional off-set printing workflow, the user makes a draft copy of the printed product and orders the printing company to produce a printed product based on the draft copy made by the user. The printing company, ~~once received~~ after receiving the order, makes a draft copy for ~~their own~~ internal use based on the draft copy provided by the user, makes corrections on the draft copy several times, prints out the finalized draft copy, processes the printed product if necessary, such as binding the printed papers, and then deliver the finished printed product to the user.

D1

2. Please amend paragraph 0033 to read as follows:

[00033] Turning to the Figures, Figs. 1-11 pertain to the first embodiment of the present invention. Turning to Fig. 1, Fig. 1 is a block diagram illustrating the apparatus of the first embodiment. In Fig. 1, reference numeral 1 shows an on-demand printing supporting device of the present invention. Numeral 2 is a customer at a customer's computer terminal (*hereinafter* "customer") who obtains, via on-demand printing supporting device 1, a printed product on which a document having text, images and pictures is recorded on the customer's desired printing material. Numeral 3 illustrates a computer network, represented by Internet, which connects on-demand printing device 1 to customer 2. Numeral 4 illustrates an editor that revises and/or changes a draft copy of the document provided by the customer 2. Editor 4 is made up of operation terminals which can be connected to on-demand printing

D2

supporting device 1. Numeral 5 illustrates an output device which stores ~~document~~ documents having text, images and pictures provided by the customer via on-demand printing supporting device 1, and records the document having text, images and pictures on a printing medium desired by the customer. It is noted that the device included in the output device 5 can be either one of toner-type digital printer 51, CD-ROM printing machine 52, ink-jet type printer 53 or magneto-optical disk read/write machine 54. Also, there can be more than one customer 2 in computer network 3.

D2

3. Please amend paragraph 0034 to read as follows:

[00034] The on-demand printing supporting device 1 ~~consists of homepage provider~~ may be constructed with homepage provider 1a for providing homepage (contents information provided by the World Wide Web (WWW) server) and file management device 1b for controlling [[the]] a document having text, images and pictures provided by the customer. Further, homepage provider 1a is made up of homepage contents 11, contents server 12 and a document having text, images and pictures in a printing information database 13, while file management device 1b is made up of file management server 14, a database 15 having the finalized document including text, images and pictures, controlled (i.e., management) information database 16 and output controller 17. Homepage contents 11 records homepage information provided by the homepage provider 1 to customer 2.

D3

4. Please amend paragraph 0035 to read as follows:

[00035] Contents server 12 enables customer 2 and/or editor 4 to input information based on the information recorded in homepage contents 11, and sends information to customer 2 and/or editor 4. Printing information database 13 records, according to the ID number of customer 2, a document having text, images and pictures ~~inputted~~ input by customer 2 from [[the]] a customer terminal via computer network 3 in accordance with the instructions given by contents server 12.

D4

5. Please amend paragraph 0036 to read as follows:

[00036] File management server 14 enables file management device 1b to record [[the]] a document having text, images and pictures retrieved by editor 4 from [[the]] printing information database 13 via contents server 12 and edited by editor 4 as a finalized document having text, images and pictures, and controlled information as a controlled file. The finalized document having text, images and pictures in ~~finalized~~ finished document database 15 records controlled files [[of]] for finalized ~~document~~ documents having text, images and pictures ~~inputted~~ input by editor 4. Output controller 17 controls ~~the finalized document~~ finished documents having text, images and pictures output to output device 5. Homepage contents 11, [[the]] a document having text, images and pictures in printing information database 13, [[the]] a finalized document having text, images and pictures in finished manuscript database (or finalized document database) 15, and controlled information database 16 can be non-volatile memories such as hard disk devices, magneto-optical disk devices, flash memory, *etc.*, and volatile memories, such as RAM (Random Access Memory)

D5

or, of a computer readable/writable storage medium which is a combination of any of the aforesaid memory devices. The performance of contents server 12, file management server 14 and output controller 17 can be ~~achieved by a~~ attained with hardware set solely for its own purpose or, a CPU (central processing unit) in which the memory may be loaded with specific programs to achieve the desired performances.

6. Please amend paragraph 0037 to read as follows:

[00037] An input device, a display device, *etc.* (not shown in figures) are connected as peripheral devices to on-demand printing supporting device 1. Here, a keyboard, a mouse, *etc.* are used as the input devices. Also, CRT (Cathode Ray Tube) display device, liquid crystal display, *etc.* [[are]] may be used as the display device.

7. Please amend paragraph 0038 to read as follows:

[00038] Fig. 2 is a flow diagram illustrating the process of the present invention. In Fig. 2, content server 12 in the on-demand printing supporting device 1 requests customer 2 to make, from the customer terminal, a cost estimate request (S1), and the cost estimate request ~~is notified to~~ notifies the on-demand printing supporting device 1 when the customer makes selection on the menu posted on the homepage which is provided by contents server 12 (Fig. 3).

8. Please amend paragraph 0039 to read as follows:

[00039] Contents server 12 displays in the customer terminal 2, an input operation screen (shown in Fig. 4), notifies customer 2 of menu selection necessary to make the cost estimate (S2), and requests customer 2 to actually make the selection in accordance with the displayed instructions (S3). Fig. 4 shows the selections for ~~document~~ documents having text, images and pictures in a certain format. This information represents the printed products which the document having text, images and pictures ~~outputted~~ output from output device 5 is recorded on the printing medium. The selection is made by inputting the various information such as paper size, number of pages, type of binding, if any, (binding by stapler, by binder, or by wrapper), whether or not a cover is to be present, type of recording media, (*e.g.*, printing by color sheet of fine quality (super-thick type), color sheet of fine quality (Resak)), number of copies, name and e-mail address for ~~notifying~~ notification of the cost estimate. A second form requesting further information from the customer may then be displayed. This form can include, but is not limited to, asking the user what color of paper is to be used in the printing process, at what location does the customer want his document or manuscript to be printed, the type of output device the customer wishes his document or manuscript to be printed on (such as toner type digital printer, CD-ROM printing device, ink-jet type printer or magnetic optical disk read/write device), and whether enlargement or reduction information for images and/or pictures, font type, font size, page margins, line spacing, page numbering, justification, printing on one side of a piece of paper or printing in duplex are to be selected by the user? All of this information is sent to the on-demand printing supporting device 1 by clicking the "submit button".

9. Please amend paragraph 0040 to read as follows:

[00040] When the above selections have been made, contents server [[12]] 14 notifies editor 4 that the cost estimate request has been ~~inputted~~ input (S4). Editor 4 is notified, via e-mail, of receipt of the cost estimate request in the format illustrated by Fig. 5, and the editor makes the cost estimate (S5) with the format illustrated by Fig. 6. The cost estimate made by the editor then is sent to customer 2 from the editor terminal via contents server 12 in a form of e-mail as shown in Fig. 6 (S6). The e-mail containing the cost estimate made by the editor also contains a customer ID and a customer password which are necessary for customer 2 to access to the document having text, images and pictures located in contents server 12. Unlike other printing services, this service does not offer substantial "volume discounts" based on the size of the document to be printed or the quantity of the documents to be printed. For this reason, editor 4 can quote an exceptionally low cost for both high volume orders and for small orders attracting both high volume customers and low volume customers.

10. Please amend paragraph 0041 to read as follows:

[00041] Upon receipt of the estimate cost, client ID and client password, the customer 2 requests submission of a document having text, images and pictures (log into printing service) by selecting "2. Data Submission" menu on the homepage provided by contents server 12 (S7), as shown in Fig. 3. Contents server 12 displays on the customer's terminal an operation panel for connecting the customer's terminal to the document having text,

images and pictures processor of contents server 12, as shown in Fig. 7 (S8). The customer 2 then inputs into the operation panel the client ID and client password previously received. The customer's terminal then is connected to the document processor having text, images and pictures ~~processor~~ by depressing the "log-in" button (S9). Contents server 12 then displays on the customer's terminal an input screen for inputting the document having text, images and pictures (S10) as shown in Fig. 8. Customer 2 then selects an appropriate document having text, images and pictures displayed by a certain data format in the customer's terminal by depressing the "reference" button[["]] under "file directory"on the screen as illustrated in Fig. 8. The document having text, images and pictures is then ~~inputted~~ input to contents server 12 by depressing "upload" button on the screen (S11). Here, PDF (Portable Document Format) with which the same image on the customer's terminal can be obtained on the printing material, or the markup language, html (Hyper Text Markup Language), are preferable as a data format for ~~document~~ documents having text, images and pictures.

D10

11. Please amend paragraph 0042 to read as follows:

[00042] Contents server 12 records the document having text, images and pictures, together with the customer's client ID, in the printing information database 13, and then notifies the editor 4 that the document having text, images and pictures has been received (S12). Receipt of ~~document~~ documents having text, images and pictures can be found by editor 4 either by periodically accessing contents server 12 by editor 4, or by notifying editor 4 [[by]] with contents server 12 upon receipt of each document having text, images and

D11

pictures. Editor 4 then retrieves the document having text, images and pictures from the ~~document having text, images and pictures in~~ printing information database 13 via contents server 12 (S13).

D11

12. Please amend paragraph 0043 to read as follows:

[00043] Fig. 10 illustrates one example of the operation in which editor 4 retrieves the document having text, images and pictures via contents server 12. Fig. 10 also illustrates a "Download" button for retrieving the document having text, images and pictures, and a "Delete" button for deleting the document having text, images and pictures from the printing information database, as well as a list of uploaded document information having text, images and pictures. In Fig. 10, "From" stands for an address where the document having text, images and pictures ~~has been received from~~ originated (to contents server 12), "To" stands for an address where the document having text, images and pictures has been sent [[to]] (from contents server 12), "Real Name" stands for the type of the document having text, images and pictures sent or received, and "Upload Time" stands for a time period for uploading a document having text, images and pictures[[,]]. Editor 4 then downloads the document having text, images and pictures necessary in accordance with the instructions set forth on the operation panel. The process of editing may include changes made to the document at the request of the customer, or may include changes initiated by the print agency itself. Editing can include but is not limited to correcting misspellings, correcting typographical errors, correcting unreadable characters that can be caused by different

D12

computer software programs used by the customer and the print agency or different font environments, formatting the document such as page margins, page numbering, line numbering, paragraph numbering, line spacing, insertion of headers and footers, change of fonts or font size, enlargement or reduction of a size of an image or picture, and formatting of equations.

D12

13. Please amend paragraph 0044 to read as follows:

[00044] For example, in Fig. 9, "try-extaro" has sent a document having text, images and pictures under filename "a" in a HTML format; column "From" shows "try-extaro", column "~~File~~ Real Name" shows "a.htm". Editor 4 retrieves the document having text, images and pictures and then edits the received document having text, images and pictures (S14). The edited document having text, images and pictures is ~~inputted~~ input to file management server 14 by editor 4, and then ~~sends~~ the edited document having text, images and pictures is sent to the finished manuscript database 15 (S15). Other ~~embodiments~~ features include the steps of editing the document having text, images and pictures sent by the customer by editor 4 (S14-1), submitting the edited version to the customer for further revisions and proofreading(S14-2), having the customer proofread ~~said~~ the document (S14-3), having the customer resubmit the proofread document back to the print agency(14-4), and then performing a second editing by the editor 4(S14-5) before the document is stored in the finalized document database 15. If no editing job is necessary, the document having text, images and pictures received by editor 4 can be sent to finalized document database 15 from

D13

D13 printing information database 13 as a finalized document having text, images and pictures.

14. Please amend paragraph 0045 to read as follows:

[00045] File management server 14 receives from editor 4 controlled printing information as a control file for controlling an edited document having text, images and pictures, and records that information in controlled (or management) information database 16 (S16). Fig. 11 illustrates contents of a control file created by editor 4. Fig. 11 illustrates record contents in the control file made by editor 4. This is also a control file in the case where a recording medium is output to an output device 5 specifying bound print, name of the sales person, information on the customer (category and name), date when complete manuscript information was made, name and parts/reference number of the complete manuscript file, the language used in complete manuscript information, number of pages, price per page, size of the print copy, quality of a cover, paper quality of the text, print information on the cover, text print information, print color of the cover, binding style, binding method, name of support staff, data form of the manuscript (kind of the manuscript), and control number of the recording medium (*e.g.* an optical magnetic disk such as MO *etc.* and a tape) which records complete manuscript information in electronic data format, *etc.*

D14

15. Please amend paragraph 0046 to read as follows:

[00046] After file management server 14 has recorded a complete document having text, images and pictures in finalized document database 15, and has recorded a control file

D15

in controlled information database 16, editor 4 gives instructions (S17) to output controller 17 to output the finalized edited document having text, images and pictures to output device 5. (S18). At this point, when output device 5 includes a plurality of devices, (*e.g.* toner digital printer 51, CD-ROM printing device 52, ink-jet printer 53, magneto-optical disk read/write device 54, *etc.[[,]]*), editor 4 selects an appropriate output device.

16. Please amend paragraph 0047 to read as follows:

[00047] Then, output device 5 records the document having text, images and pictures on a recording medium desired by the customer(for example, a printed and bound product or a CD-ROM) (S19). The final printed products will be delivered to customer 2 via delivery ~~means~~ routes such as mail, private home delivery services, *etc.* (S20). The output devices are capable of outputting 180 sheets per minute and may or may not comprise digital output devices.

17. Please amend paragraph 0048 to read as follows:

[00048] Referring to Fig. 12 and the second embodiment of the present invention, the elements illustrated in Fig. 12 bearing the same reference numeral numbers as the elements illustrated in Fig. 1, perform the same functions as the elements illustrated in Fig. 1 bearing the same reference numeral numbers found in Fig. 12. ~~As to the reference numeral numbers~~ Reference numerals not found in Fig. 1, that is, 2-1 ~ 2-n, ~~this represents~~ represent a plural number of customers and 5-1 ~ 5-n ~~represents~~ represent a plural number of output devices

which are connected to computer network 3, with which the document having text, images and pictures provided by the customers are recorded, via the on-demand printing support system, on the printing medium desired by the customers via network printing. As explained in the first embodiment above, output devices 5-1 through 5-n can be a toner-type digital printer 51 which electronically gathers pages in order, CD-ROM printing machine 52, ink-jet type printer 53, or magneto-optical disk read/write machine 54, *etc.* Devices to be included in output device 5 may be one of the ~~following~~ followings: toner-type digital printer 51 which electronically gathers pages in order, CD-ROM printing machine 52, ink-jet type printer 53, or magneto-optical disk read/write machine 54, *etc.*

D17

18. Please amend paragraph 0050 to read as follows:

[00050] Referring now to Fig. 13, Fig. 13 is a flow diagram for the second embodiment of the present invention. In Fig. 13, the elements illustrated ~~in Fig. 13~~ bear the same step numbers as the elements illustrated in Fig. 2 and perform the same functions as the step numbers illustrated in Fig. 1. With respect to the step ~~numbers~~ number (S18) which is not illustrated in Fig. 2, when file management server 14 records the finalized document having text, images and pictures in finalized document database 15, the edited document having text, images and pictures in conjunction with the control information in controlled information database 16 are output by output controller 17 after editor 4 selects an output device (S21). Editor 4 then selects an output device which is located nearest the customer. For example, if the document having text, images and pictures is provided by customer 2-1,

D18

then editor 4 selects output device 5-1, and if the document having text, images and pictures is provided by customer 2-2, editor 4 selects output device 5-2. Upon selection of an output device, output controller 17 outputs, in accordance with the instructions provided by editor 4 (S17), the edited document having text, images and pictures to the selected output device (S22). The selected output device records the document having text, images and pictures on the recording medium desired by the customer (bound printed material or CD-ROM) (S19), and the finished products are shipped to the customer 2 by mail or other delivery means (S20).

D18

19. Please amend paragraph 0052 to read as follows:

[00052] It is further noted that a computer system may be used to function as the on-demand printing supporting system described above, by recording the programs necessary to ~~function~~ operate the on-demand printing supporting system in the computer readable recording medium so as to store the recorded programs in the computer system.

D19

20. Please amend paragraph 0053 to read as follows:

[00053] The aforesaid computer system includes hardware ~~and software~~, such as OS or peripheral devices. When the WWW (World Wide Web) system is used, homepage providing environment (or, display environment) is also included. Also, the aforesaid computer readable recording medium are memory devices stored in a computer system, such as floppy disks, magneto-optical disks, ROMs, CD-ROMs, or storage devices. Further, the

D20

aforesaid computer readable recording medium includes transmission media or transmission wave, for example, which keeps the programs actively for a short time [[as]] while transmitting the programs via computer networks, such as Internet, and communication lines, such as telephone lines. Also, volatile memory installed inside a computer system which is to be a server or a client, for example, may be included in the aforesaid computer readable recording medium, which keeps the programs for a certain time.

21. Please amend paragraph 0054 to read as follows:

[00054] It is further noted that the above-described programs may be enable part of the on-demand printing supporting system described above. Also, the programs may use a so-called "differential program" which can be combined with programs which have already been stored in the computer system so as to function as a complete on-demand printing supporting system.